107TH CONGRESS 1ST SESSION

H. R. 2050

To authorize the National Science Foundation to undertake certain activities in support of research on learning.

IN THE HOUSE OF REPRESENTATIVES

June 5, 2001

Mr. Smith of Michigan introduced the following bill; which was referred to the Committee on Science

A BILL

To authorize the National Science Foundation to undertake certain activities in support of research on learning.

1	Be it enacted by the Senate and House of Representa-
2	tives of the United States of America in Congress assembled,
3	SECTION 1. FINDINGS.
4	The Congress finds that—
5	(1) in virtually every sector of society—health,
6	defense, transportation, agriculture, etc.—research
7	is used to guide policy choices;
8	(2) in education, however, research has not
9	been effectively utilized as a tool for informing policy
10	and guiding reform, with less than 0.03 percent of

- the \$647,800,000,000 spent on elementary and secondary education invested in research of what educational techniques actually work and on ways to improve teaching;
 - (3) the 1997 President's Committee of Advisors on Science and Technology (PCAST) report entitled "The Use of Technology to Strengthen K–12 Education in the United States" recommended that our education research investment be increased to 0.5 percent and that educational hypotheses be subjected to appropriately rigorous evaluation;
 - (4) a significant body of research and knowledge on the science of learning currently exists; however, educational materials and practices are rarely aligned to this knowledge, and new education theories are often incorporated in classrooms on the basis of only tenuously supported data;
 - (5) a cultural divide between education researchers and education practitioners—such as teachers—currently exists;
 - (6) an expert panel convened by the National Research Council recommended in 1999 that more education research be focused on issues of importance to education practitioners and be conducted by

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

- teams of both traditional researchers and teachers
 and other education practitioners;
- (7) the education research effort to date is typified by a largely scattershot approach, with little coordination of the research effort or focus on particularly compelling questions; and
- 7 (8) a 1999 report from the National Research 8 Council entitled "Improving Student Learning" rec-9 ommended the adoption of a national, strategic edu-10 cation research program that would focus efforts on 11 a limited number of the most critically important re-12 search questions.

13 SEC. 2. RESEARCH ON LEARNING.

- 14 (a) In General.—For the purpose of integrating
- 15 scientific disciplines in relation to research on learning,
- 16 and gaining a better understanding of how such research
- 17 and educational practice can be reconciled, the National
- 18 Science Foundation shall continue to support research on
- 19 learning, focusing on the following 4 areas:
- 20 (1) Brain research as a foundation for research on human learning.
- 22 (2) Behavioral, cognitive, affective, and social

- 1 (3) Science, mathematics, engineering, and 2 technological learning in formal and informal edu-3 cational settings.
- 4 (4) Learning in complex educational systems.
- 5 (b) AUTHORIZATION OF APPROPRIATIONS.—There
- 6 are authorized to be appropriated to the National Science
- 7 Foundation for carrying out this section \$29,000,000 for
- 8 fiscal year 2002, \$33,000,000 for fiscal year 2003, and
- 9 \$37,000,000 for fiscal year 2004.

10 SEC. 3. RESEARCH ON LEARNING CENTERS.

- 11 (a) Development of Research Priorities.—The
- 12 Director of the National Science Foundation (in this Act
- 13 referred to as the "Director"), in consultation with the
- 14 National Academy of Sciences, shall review past research
- 15 on learning, assess current research efforts, and not later
- 16 than 120 days after the date of the enactment of this Act
- 17 develop a set of specific education research priorities to
- 18 provide the strategic focus of the Centers established
- 19 under subsection (b). The Director shall ensure that the
- 20 development of such priorities is informed by the most
- 21 pressing needs of the education system.
- 22 (b) Establishment of Centers.—The Director
- 23 shall make grants for the establishment of not more than
- 24 5 Centers of Research on Learning. The purpose of these
- 25 Centers shall be to integrate the work of multidisciplinary

- 1 teams of researchers, education practitioners, and policy-
- 2 makers to support the research priorities developed under
- 3 subsection (a), and to facilitate the incorporation of the
- 4 results of that research into educational practice. Grant
- 5 awards under this subsection shall be made through an
- 6 open, peer-reviewed competition.
- 7 (c) Strategic Focus of Centers.—Each Center
- 8 shall focus on addressing one of the specific education re-
- 9 search priorities developed by the Director under sub-
- 10 section (a).
- 11 (d) Activities of Centers.—The Centers shall
- 12 promote active collaborations among physical, biological,
- 13 and social science researchers, education practitioners,
- 14 and policymakers. The Centers shall be responsible for—
- 15 (1) evaluating existing research and designing,
- 16 conducting, or coordinating research that addresses
- 17 the Center's strategic focus;
- 18 (2) stimulating research in relevant areas with-
- in the larger research community and synthesizing
- the findings from among this community;
- 21 (3) planning future research;
- 22 (4) facilitating the dissemination of research re-
- sults to education practitioners and the incorpora-
- tion of those research results into the education sys-
- 25 tem; and

- 1 (5) assessing the impact of the incorporation of
- 2 research results described in paragraph (4) on stu-
- dent performance.
- 4 (e) AUTHORIZATION OF APPROPRIATIONS.—There
- 5 are authorized to be appropriated to the National Science
- 6 Foundation for carrying out this section \$3,000,000 for
- 7 fiscal year 2002, \$6,000,000 for fiscal year 2003, and
- 8 \$6,000,000 for fiscal year 2004.

9 SEC. 4. INTERAGENCY EDUCATION RESEARCH INITIATIVE.

- There are authorized to be appropriated to the Na-
- 11 tional Science Foundation for participation in the Inter-
- 12 agency Education Research Initiative, \$28,000,000 for fis-
- 13 cal year 2002, \$31,000,000 for fiscal year 2003, and
- 14 \$33,000,000 for fiscal year 2004.

 \bigcirc